# STAAD.Pro

V8i (SELECTseries 4)

# **User Manual**



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### **End User License Agreement**

To view the End User License Agreement for this product, review: eula\_en.pdf.

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# Chapter 1 Installation

This section guides you through the process of installing STAAD.Pro on your computer. In order to do so, please login as an administrative user. STAAD.Pro is installed by invoking a self-contained executable (file extension .exe). Simply follow the instructions presented in the dialogs.. For details on the installation, please refer to the sections in this installation guide titled Package Installer and Installation Wizard.

**Note:** Some windows and dialogs may vary slightly from images included in this installation document, depending on the version of Windows you are using.

## 1.1 Considerations Before Installing

Please read the following items prior to installation to ensure the process performs as expected.

**Note:** STAAD.Pro is compatible with Windows XP, Windows 2000, Windows Vista, and Windows 7 operating systems only! Please refer to the Requirements file for a complete list of compatible Windows operating systems and minimum system requirements.

#### 1.1.1 Internet Connection

The Installer package attempts to install any missing prerequisites prior to installing STAAD.Pro. Some third party prerequisites are not included so the Installer package attempts to download them from the Internet and initiate their installation for you. Therefore, a Internet connection may be required to complete the installation process.

#### 1.1.2 Windows Vista or Windows 7 Request to Run as Administrator

If your computer is using either the Window Vista or the Windows 7 operating systems – even if you are logged in as a user with administrative privileges – certain programs may require confirmation to be run with administrative privileges. By default a Windows Explorer process runs with standard user privileges, even if the login ID has full administrative privileges. To overcome this, the installer may request to run with administer privileges when launched. Please provide administrator credentials (if requested) and accept this dialog before proceeding.

## 1.2 Package Installer

In order for the STAAD.Pro application to run, it needs a number of system requirements known as prerequisites, to be in place. To ensure that the necessary prerequisites are installed and of a suitable version, the STAAD.Pro installer is been bundled into a package installer. This means that you do not have to download the prerequisites separately.

In order to prevent the packager becoming too large, the package includes two types of prerequisite installation: a full installation or a bootstrap installation. The former includes the entire prerequisite installation, where as a bootstrap installer is only a small installation that is used to identify if the prerequisite is present or not and, if not, it will download the full installation and install it.

Once the Package installer is initiated, it will follow sequentially the installations as listed on the packager window, starting with the first prerequisite installation and finishing with the STAAD.Pro installation. If any of the prerequisites are already installed and are an older version than required, they will automatically be updated. If they are of the same or more current version, then they will be skipped.

Refer to the window icons and messages for each item during the process for the action take for each item:

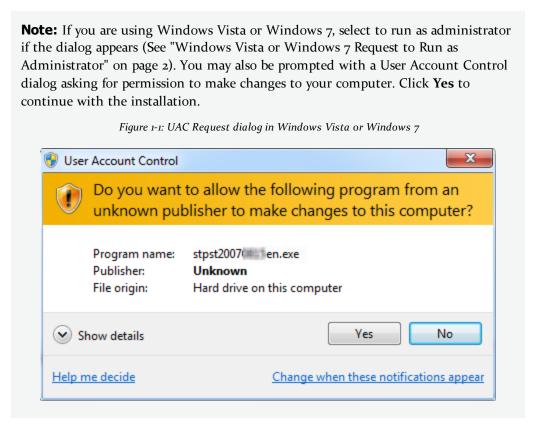
- Installations that have been installed will be marked with a green tick and displayed in blue text
- Installations that have been skipped will be marked with a green tick to indicate that it has been checked and the installation will be shown in gray text
- Installations that have failed will be marked with a red cross. Details of possible error
  messages are included in the Requirements document that can accessed from the
  package installer Window.

**Note:** When opening the Windows Control Panel > Add Remove Programs (Programs and Features in Windows 7), the packager does not display, but all the individual installations that have been installed will be displayed and if required can be uninstalled separately.

Additionally, if one or more of the installations require a system reboot, this will be suppressed until all the installations have taken place. If necessary, you will be prompted to reboot once the installer package is finished.

Use the following procedure to install STAAD.Pro:

1. Double-click the Package Installer file named stp200709XXen.exe (where XXen refers to the current build number and language) executable file to launch it.



The Installer screen opens.

2. Click **Readme** to display the installation Requirements file in Internet Explorer.

You may close the Internet Explorer window when you have finished reviewing the information.

\_ \_ X STAAD.Pro V8i(SELECTSeries 4) Installer The following software packages are being installed: Windows Installer Version 3.1v2 Microsoft .NET Framework Version 3.5 SP1 Bentley IEG License Service [2.0.20.1] STAAD.Pro V8i (SS4) [20.07.09.11] Bentley OpenSTAAD OEM [08.02.09. STAAD.foundation V8i (SS4) [05.03.00.33] StrucLink for STAAD.Pro V8i [20.12.08. PipeLink for STAAD.Pro V8i (SS1) [20.11.09.11] Note: Please review "Readme" document before installing the product **Bentley** components. Install companion products Readme Install Close (StrucLink & PipeLink).

Figure 1-2: Package installer welcome page

- (Optional) If you do not wish to install the optional component products, deselect the Install companion products (StrucLink & PipeLink) option on the left hand side of the dialog.
- 4. Click **Install**. The Package Installer proceeds by verifying prerequisites are present and, if they are not, attempting to install them.



Figure 1-3: Package installer installation process page

**Note:** Details for to the installation of third-party prerequisites are included in those packages. Please refer to those instructions if help is required.

- Once the prerequisites are confirmed to be installed, the STAAD.ProV8i (SELECTseries
   InstallShield Wizard opens. Refer to the following section titled "<u>Installation</u> <u>Wizard</u>" for additional help with this process.
- 6. Once the STAAD.Pro installation wizard has finished, you may click **Done** to exit the Package Installer.

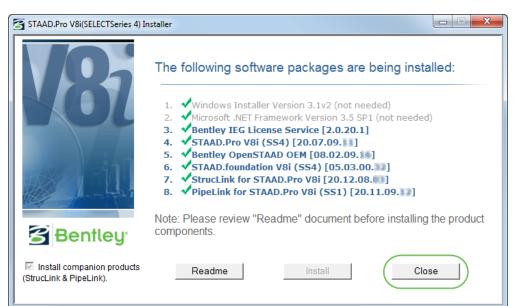


Figure 1-4: Package installer complete page

7. (Optional) Depending on your installation options, you may need to restart your computer before all changes can take effect.

### 1.3 Installation Wizard

Once the prerequisites have been installed, you are greeted by the STAAD.ProV8i
(SELECTseries 4) InstallShield Wizard welcome dialog. Click Next > to proceed with
the installation process.



Figure 1-5: InstallShield Wizard welcome page

**Note:** If you have a previously installed version of STAAD.Pro on your computer, you will be prompted to verify you wish to overwrite this the older version.

2. You are now presented with the End User License Agreement for this software. Please read the agreement and then select the option I accept the terms in the license agreement to accept and proceed. You may also print a copy for your records. Click Next > to continue.

STAAD.Pro V8i SELECTseries 4 - InstallShield Wizard License Agreement Please read the following license agreement carefully. EULA version 2010-09-15-en END USER LICENSE AGREEMENT FOR BENTLEY SOFTWARE IMPORTANT - READ CAREFULLY: This End-User License Agreement ("EULA") is a legal agreement between you (either an individual or a single entity) and Bentley Systems International Limited, if you are located outside of the geographic boundaries of the United States I accept the terms in the license agreement I do not accept the terms in the license agreement InstallShield

Figure 1-6: InstallShield Wizard EULA page

3. You are asked to specify an installation folder. This is the folder which contains the program on your computer. The default location is C:\SProV8i. Click Change... if you wish to select a different location. Once you have selected a destination folder, click **Next** > to continue.

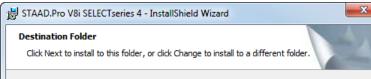


Figure 1-7: InstallShield Wizard destination folder page

< Back

Next >

Cancel

Install STAAD.Pro V8i SELECTseries 4 to: C:\SProV8i\ Change... InstallShield < Back Next > Cancel

4. STAAD.Pro is licensed using a Bentley SELECT XM license, thus you are next asked to

specify the **Server Name** which hosts the licenses that STAAD.Pro will use, the **Site Activation Key**, and the default email address that is logged when licenses are checked out. If the workstation is already using other Bentley Systems software that uses SELECT XM licensing, then these fields are pre-populated in the dialog.

**Note:** See "License" on page 15 of this guide for additional information.

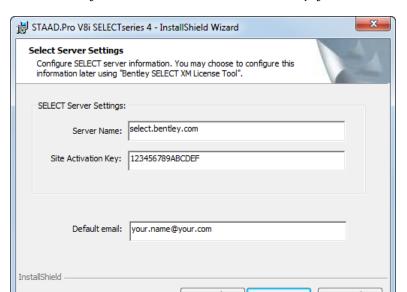


Figure 1-8: InstallShield Wizard SELECT Server page

5. You are then prompted to provide your **User Name** and **Organization**, as well select who will have access to the program on this machine. These fields are filled in with default values taken from your Windows operating system, but you may change the information as needed. Once completed, click **Next** > to continue.

Figure 1-9: InstallShield Wizard customer information page

 You are next be asked to which unit system you wish to use by default. Select Imperial/ English (i.e., U.S. Customary) or Metric (i.e., SI). Once you have selected a unit system, click Next > to continue.

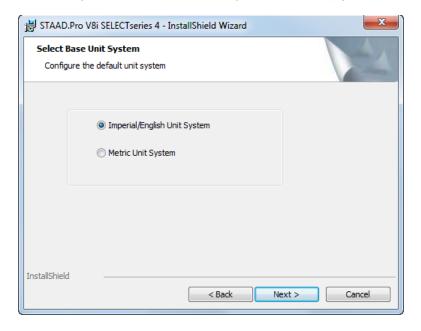


Figure 1-10: InstallShield Wizard default unit selection page

7. The installer has gathered all the necessary information. Click **Install** to finish the process. The wizard begins installing the program onto your computer. Once the

process is complete, click Finish to exit the wizard.

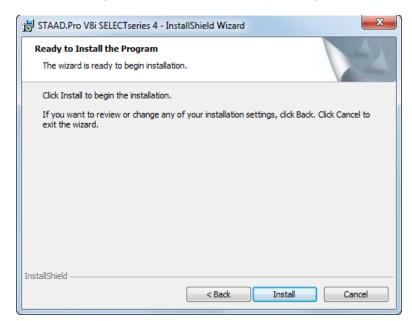


Figure 1-11: InstallShield Wizard completion page

# 1.4 Starting STAAD.ProV8i (SELECTseries 4)

Now the program is ready for you to use. You now have a new icon for **STAAD.Pro V8i** on your desktop which you can double click to start the program.

Figure 1-12: STAAD.Pro V8i program icon



Alternatively, you can start the program by clicking the Start Button (found on the Windows task bar) and then selecting **All Programs > Bentley Engineering > STAAD.Pro V8i > STAAD.Pro**.

**Warning:** Until you have activated a <u>license</u> for the program, it will remain in demo mode and only function for 15 days past installation.

#### 1.5 Runtime Considerations for Windows Vista or 7

The installation process creates a STAAD.Pro configuration file (STAADPro20070.ini) at the root folder where you have installed STAAD.ProV8i (SELECTseries 4) (C:\SProV8i, by default) and then copies this configuration file into the Windows folder (C:\Windows) so that all users can access the configuration file during runtime. Subsequently, if you make changes to the configuration (e.g., base unit system, default design code, etc.), STAAD.Pro will attempt to save the revised configurations in this file. However, due to the revised security regime used in Windows Vista and Windows 7, STAAD.Pro will not be able to update the configuration file located in the Windows folder, thus all changed configurations will be lost.

# Use the following procedure to allow users to retain custom configurations:

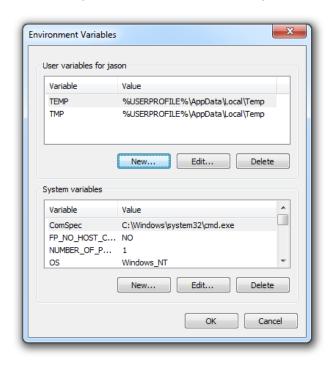
- Copy this configuration file (STAADPro20070.ini) to a folder where the user has write permission.
- 2. In Windows 2000 or XP: From the Windows desktop (or from the Start menu), right-click on the My Computer icon and select **Properties** from the pop-up menu.
  - In Windows Vista or Windows 7: From the Windows Start menu (or from a Windows Explorer window), right-click on the Computer icon and select **Properties** from the pop-up menu. Click **Advanced system settings** found in the right column.
- 3. Select the Advanced tab and then click **Environment Variables**.

× System Properties Computer Name Hardware Advanced System Protection Remote You must be logged on as an Administrator to make most of these changes. Visual effects, processor scheduling, memory usage, and virtual memory Settings... User Profiles Desktop settings related to your logon Settings... Startup and Recovery System startup, system failure, and debugging information Settings... Environment Variables... OK Cancel Apply

Figure 1-13: System Properties dialog Advanced tag

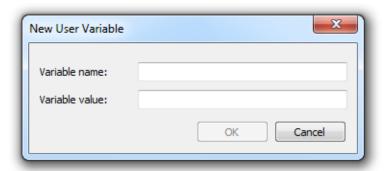
4. In the User variables panel, click New....

Figure 1-14: Environment Variables dialog



 Enter the Variable NameSPROINIMAP and enter the full path name of the copied configuration file for the Variable Value (e.g., C:\Users\Document\STAADPro20070.ini). Click OK.

Figure 1-15: New User Variable dialog



6. Repeat this process for all user profiles using STAAD.Pro on a given computer. This will ensure all individual users running STAAD.Pro on that computer can maintain their own copies of the configuration settings.

Similarly, STAAD.Pro comes with several standard example problems within the Examp subfolder where STAAD.Pro was installed (e.g., C:\SProV8i\STAAD\Examp). If you wish to run these sample problems, Windows Vista or Windows 7 may not allow STAAD.Pro to generate the output files under this folder if your user account does not have the write privilege in this folder. If that is the case, you may copy these sample input model to a user-account specific folder where your have full access and let program open the sample models from that folder (e.g., your account's My Documents folder).

# Chapter 2 **License**

Please review the following information regarding Bentley Systems' licensing.

## 2.1 Bentley SELECT License System

The Bentley SELECT License may be used for various workstation configurations: via the Internet and Bentley's SELECT server, a networked machine connected to a local SELECT Server, or a standalone workstation not connected to a network of any kind.

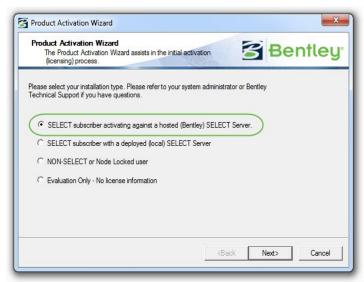
### 2.1.1 Using a Bentley SELECT License Server

This is for installations which use a Bentley Server to authenticate the Bentley SELECT License used when running STAAD.Pro.

In order to complete the installation, the SELECT Server Name and Site Activation key is required. If you do not have this, please contact Bentley Systems technical support. Without this information, the installation will operate using a trial license for 15 days only.

- 1. Install STAAD.Pro following the instructions in the <u>Installation</u> section of this document, found on page 1.
- Open the Bentley SELECT XM License Management Tool by clicking the Start Button (found on the Windows task bar) and then selecting All Programs > Bentley Engineering > STAAD.Pro V8i > SELECT License Tools > Bentley SELECT XM License Management Tool (typical location).
- 3. If you are authenticating for the first time, the following Product Activation Wizard dialog opens. Otherwise, proceed to step five below.

Figure 2-1: Product Activation Wizard installation type page

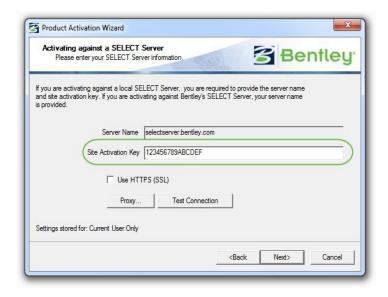


Select the option SELECT subscriber activating against a hosted (Bentley) SELECT Server and click Next >.

4. The following dialog opens with the **Server name** already provided for Bentley's server. Enter the **Site Activation Key** received from Bentley Systems and click **Next** >.

Before accepting the entered information you may also choose to click **Test Connection** to confirm that the entries are correct.

Figure 2-2: Product Activation Wizard SELECT Server data page



Proceed to step seven below.

5. If the Product Activation Wizard dialog did not open (i.e., this is not the first time this SELECT Server information has been set), then the License Management Tool window will open. Select **Tools** > **Options...**.

Figure 2-3: Select Tools > Options... to edit the SELECT Server settings

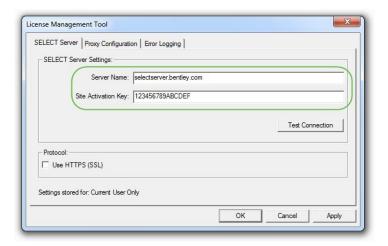


The License Management Tool options dialog opens.

6. In the License Management Tool options dialog SELECT Server tab, enter the SELECT Server name and the Site Activation Key provided by Bentley Systems and click the OK button. If you do not know these, please contact you system administrator.

Before accepting the entered information you may also choose to click **Test Connection** to confirm that the entries are correct.

Figure 2-4: The License Management Tool dialog SELECT Server tab



7. After the information is accepted by the system, the program will then display all the available licenses for your use as shown in the following dialog box.

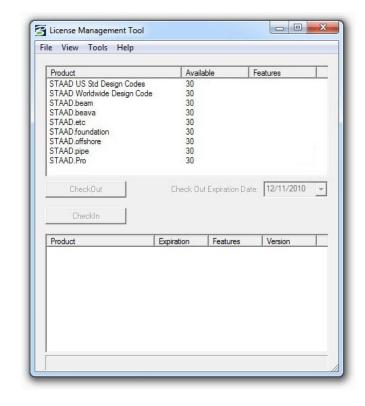


Figure 2-5: The License Management Tool dialog

The license security is now in place, the installation is complete, and STAAD.Pro is ready for use.

**Note:** You may need to contact your system administrator if your organization uses a proxy server to connect to the Internet. Click **Proxy...** in the Product Activation Wizard dialog or the Proxy configuration tab in the Options dialog to display a dialog for entering these connections settings.

### 2.1.2 Using a local SELECT License Server

This is for installations which use a local server to authenticate the Bentley SELECT License, which is used when running STAAD.Pro.

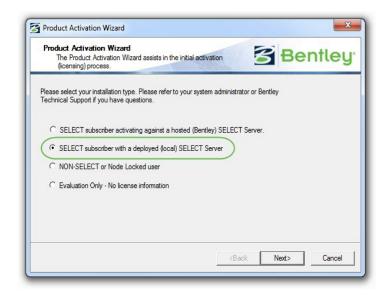
In order to complete the installation, the SELECT Server Name and Site Activation key will be required. If you do not have these, please contact your network administrator. Without this information, the installation will operate using a trial license for 15 days only.

- 1. Install STAAD.Pro following the instructions in the Installation section of this document, found on page 1.
- 2. Open the Bentley SELECT XM License Management Tool by clicking the Start Button (found on the Windows task bar) and then selecting **All Programs > Bentley**

# Engineering > STAAD.Pro V8i > SELECT License Tools > Bentley SELECT XM License Management Tool (typical location).

3. If you are authenticating for the first time, the following Product Activation Wizard dialog opens. Otherwise, proceed to step five below.

Figure 2-6: Product Activation Wizard installation type page



Select the option SELECT subscriber with a deployed (local) SELECT Server and click Next.

4. In the following dialog, enter the **Server name** and the **Site Activation Key** provided by Bentley Systems and then click **Next**. If you do not know these, please contact you system administrator.

Before accepting the entered information you may also choose to click **Test Connection** to confirm that the entries are correct.

Activating against a SELECT Server
Please enter your SELECT Server information.

If you are activating against a local SELECT Server, you are required to provide the server name and site activation key. If you are activating against Bentley's SELECT Server, your server name is provided.

Server Name | your.selectserver |
Site Activation Key | 123456789ABCDEF |

Use HTTPS (SSL) |
Proxy... | Test Connection |

Settings stored for: Current User Only

Figure 2-7: Product Activation Wizard SELECT Server data page

Proceed to step seven below.

5. If the Product Activation Wizard dialog did not open (i.e., this is not the first time this SELECT Server information has been set), then the License Management Tool window opens. Select **Tools > Options...**.

Figure 2-8: Select Tools > Options... to edit the SELECT Server settings

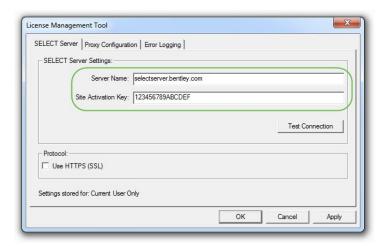


The License Management Tool options dialog opens.

6. In the License Management Tool options dialog SELECT Server tab, enter the deployed SELECT **Server name** and the **Site Activation Key** provided by Bentley Systems and click **OK**. If you do not know these, please contact you system administrator.

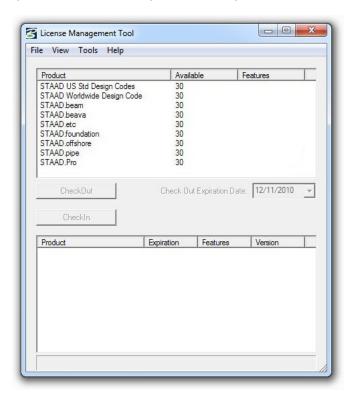
Before accepting the entered information you may also choose to click **Test Connection** to confirm that the entries are correct.

Figure 2-9: The License Management Tool dialog SELECT Server tab



7. After the information is accepted by the system, the program will then display all the available licenses for your usage as shown in the following dialog.

Figure 2-10: The License Management Tool dialog with Available licenses



The license security is now in place. The installation is complete and STAAD.Pro is ready for use.

#### 2.1.3 Local SELECT Server Installation

This is for installations which use a local server on the client network to authenticate the Bentley SELECT license required when running STAAD.Pro.

- 1. Obtain your SELECT ID. This will be supplied by Bentley Systems.
- 2. Using your web browser, go to the URL:

http://appsnet.bentley.com/myselectcd/

and use your SELECT login credentials to log on to this site.

- 3. Download the SELECT Server.
- 4. Run this installation on the server that will be the SELECT Server.

**Note:** Details of the SELECT Server installation are included in the download. Refer to those instructions for additional information.

#### 2.1.4 Standalone workstations

This is for installations which do not use the Internet or network to authenticate the Bentley SELECT License which is required to run STAAD.Pro.

In order to complete the installation, your SELECT license file (\*.xml) will be required. I you do not have this file, please contact Bentley Systems technical support. Without this file, STAAD.Pro will operate using a trial License for only 15 days.

- 1. Install STAAD.Pro following the instructions in the Installation section of this document, found on page 1.
- Open the Bentley SELECT XM License Management Tool by clicking the Start Button (found on the Windows task bar) and then selecting All Programs > Bentley Engineering > STAAD.Pro V8i > SELECT License Tools > Bentley SELECT XM License Management Tool (typical location).
- 3. If you are authenticating for the first time, the Product Activation Wizard dialog opens. Otherwise, proceed to step four below.

To configure Node Locked or Standalone SELECT license, you may exit from the Product Activation Wizard by clicking on the "Cancel" button. The Bentley License Management Tool will be displayed.

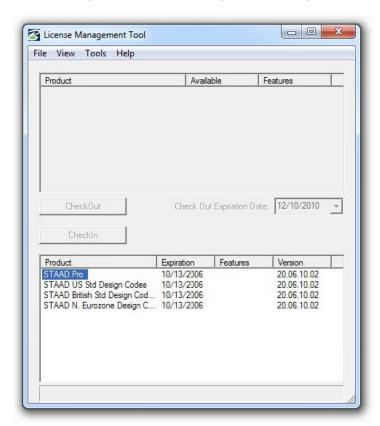
4. Select **File** > **Import...**. The Import License File dialog opens. Browse to the location of the license (.xml) file, select it and click **Open** to import the license file.

Figure 2-11: Select File > Import to import a License file



5. If the file is successfully imported, the available licenses will be displayed in the lower panel.

Figure 2-12: The License Management Tool dialog



The license security is now in place. The installation is complete and STAAD.Pro is ready for use.

## 2.2 Bentley SELECT Configuration Tool For STAAD.Pro

The STAAD.Pro software can have multiple codes and add on modules. The Bentley Select system of licensing groups these codes and modules into predefined packs. License for appropriate packs have to be purchased. It is possible to purchase a different number of licenses for each individual pack.

The STAAD SELECT XM License Configuration tool is started by clicking the Start button and then selecting (All) Programs > Bentley Engineering > STAAD.Pro V8i > SELECT License Tools > STAAD SELECT XM License Configuration. This window allows you to select a combination of licenses that are likely to be accessed from a particular installation of STAAD.Pro on your computer.

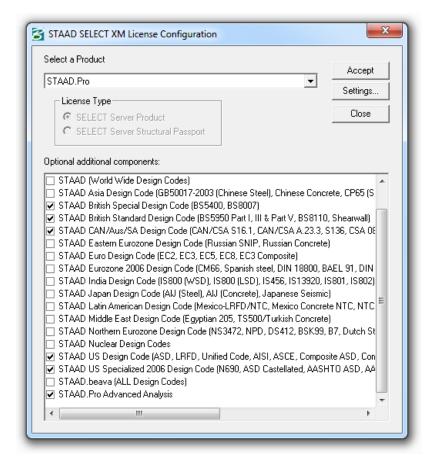


Figure 2-13: The STAAD SELECT XM License Configuration dialog

#### 2.2.1 License Options

There are two types of license options:

- SELECT Server Product License allows the use of specific software for which license(s) have been purchased.
- SELECT Server Structural Passport License allows the usage of all structural software offered by Bentley under the Structural Passport scheme.

To be able to select one of these, knowledge of the license type is required. This information is internal to your organization and you may contact your system administrator or program director about this.

#### 2.2.2 Using the License Configuration window

#### **Product List**

Select the product from the STAAD family you wish to configure from the drop-down list.

#### License Type

Select one of the license types as described above.

#### Accept

Records the checked options and closes this configuration tool. Please note that every time you run this tool, you have to make all the selections afresh. The tool will not echo your previous selection(s).

#### Settings

Opens the Bentley SELECT XM License Management tool. The use of this tool has been described in section 1.1 Bentley SELECT License System.

#### Close

Exits the configuration tool.

#### **Optional Components List**

The list of codes and modules shown will contain only those that are applicable to your organization. In the dialogue box select *only* those that are likely to be used from this installation and then click **Accept**.

**Warning:** It is important to only select components that you are likely to use as STAAD.Pro will use up one license of each code pack or module that you select in this list. Therefore, every time STAAD.Pro is invoked from this installation, the license count for each of the checked components will be reduced by one on the server and hence will not be available to any other installation in your organization until this instance has finished running.

### 2.2.3 Manage License Configuration on the STAAD.Pro start page

Alternately, STAAD SELECT License Configuration operations can also be performed at the start up page (when STAAD.Pro program is running and no model file is open).

Figure 2-14: The License Configuration dashboard in the STAAD.Pro Start Page



# 2.3 Bentley IEG License System

STAAD.Pro uses the IEG License System. This is installed on your computer when the Installer Package is run as described on page 2. No other considerations are necessary.

## 2.4 Legacy Copy Protection Systems

This version of STAAD.Pro is only supported with the Bentley SELECT license system. If you are upgrading your STAAD.Pro from an older version which used a legacy system such as a hard lock, then please contact your STAAD.Pro sales representative to obtain you SELECT license credentials.

# Chapter 3 Technical Support

These resources are provided to help you answer support questions:

- Service Ticket Manager <a href="http://www.bentley.com/serviceticketmanager">http://www.bentley.com/serviceticketmanager</a> Create and track a service ticket using Bentley Systems' online site for reporting problems or suggesting new features. You do not need to be a Bentley SELECT member to use Service Ticket Manager, however you do need to register as a user.
- Knowledge Base <a href="http://appsnet.bentley.com/kbase/">http://appsnet.bentley.com/kbase/</a> Search the Bentley Systems knowledge base for solutions for common problems.
- FAQs and TechNotes —
   <a href="http://communities.bentley.com/Products/Structural/Structural\_Analysis\_\_\_">http://communities.bentley.com/Products/Structural/Structural\_Analysis\_\_\_</a>

   Design/w/Structural\_Analysis\_and\_Design\_\_Wiki/structural-product-technotes-and-faqs.aspx Here you can find detailed resolutions and answers to the most common questions posted to us by you.
- Ask Your Peers <a href="http://communities.bentley.com/forums/5932/ShowForum.aspx">http://communities.bentley.com/forums/5932/ShowForum.aspx</a> —
   Post questions in the Be Community forums to receive help and advice from fellow users.



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